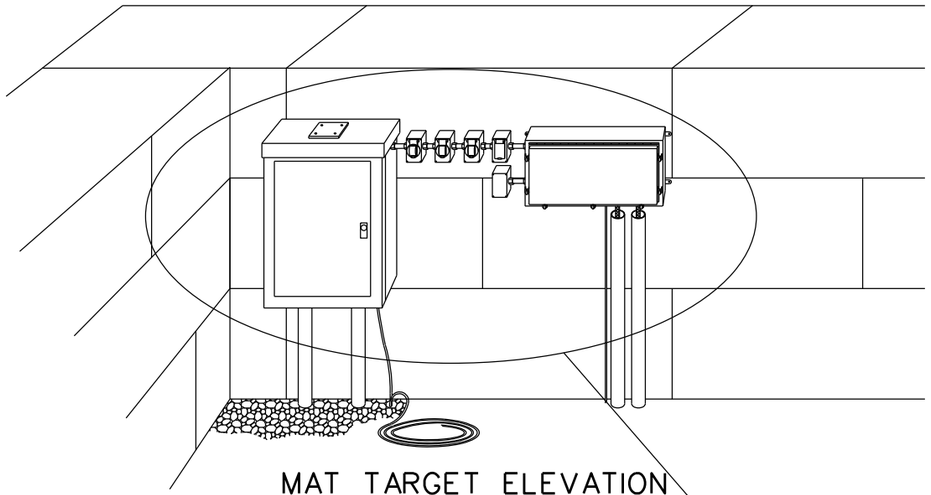
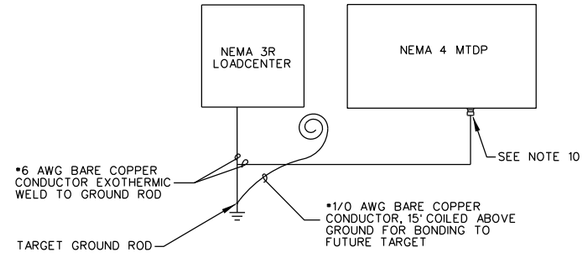


## MAT TARGET ELEVATION

SCALE: NOT TO SCALE




## EMPLACEMENT GROUNDING DETAIL

SCALE: NOT TO SCALE

PANEL BOARD: PB-xx LOCATION: XXXXXXX MOUNTED: SURFACE FEED: BOTTOM

100 AMP MIN MAIN LUGS ONLY ASYM A.I.C. MIN.:10,000

VOLTAGE: 240/120 PHASE: 1 WIRE: 3 RATING: NEMA 3R

| LOAD SERVED | NO. POLES | TRIP AMPS | WIRE SIZE | VA/ PHASE A | VA/ PHASE B | CKT NO. | CKT. NO. | VA/ PHASE A | VA/ PHASE B | WIRE SIZE | TRIP AMPS | NO. POLES | LOAD SERVED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SURGE ARRESTOR | 2 | --- | --- | --- | --- | 1 | 2 | 1900 | 1900 | 12 | 20 | 2 | MAT- NEMA L14-20R, 2-NEMA L5-20R, DPR |
| FEED THRU PROVISIONS | 2 | --- | --- | --- | | 5 | 6 | 50 | | 12 | 20 | 1 | MR |
| | | | | | | 7 | 8 | | | | | | SPACE |
| | | | | 0 | 0 | | | 1950 | 1900 | | | | |

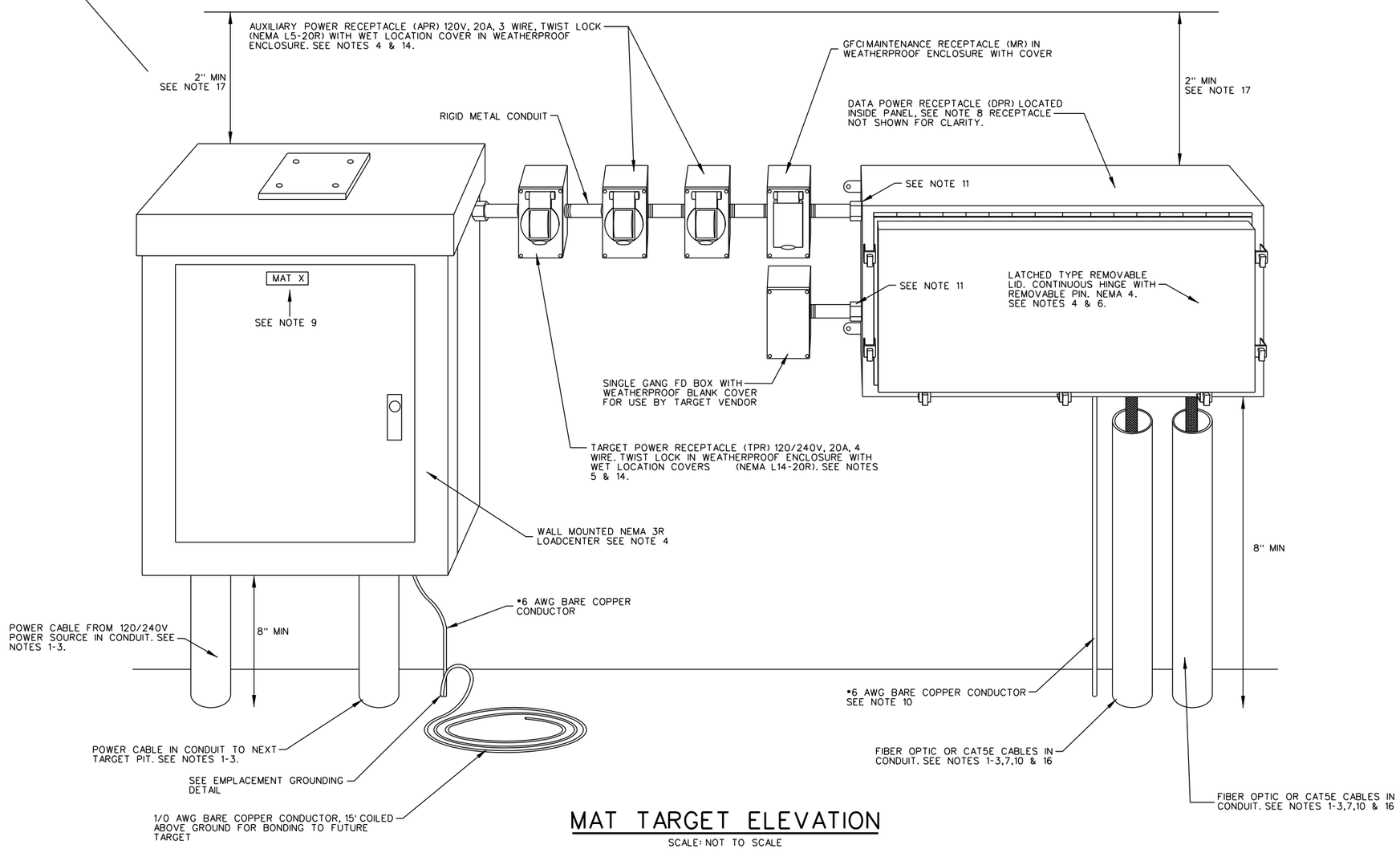
TOTAL VA PHASE: A: 1950
TOTAL VA PHASE: B: 1900

TOTAL CONNECTED WATTAGE: 3850
95% DEMAND WATTAGE: 3800

SUPPLIED FROM: TRSF-XX TOTAL DEMAND AMPS: 16

NOTES:

1. CONDUIT TO EXTEND 5 FEET BEYOND EMPLACEMENT.
2. CABLES/CONDUITS ARE ROUTED FROM SIDE OF BERM TO PREVENT CABLE DAMAGE DURING MAINTENANCE OF BERM.
3. POWER AND DATA INSTALLED IN SAME TRENCH.
4. EQUIPMENT SHALL NOT BE MOUNTED HIGHER THAN 2" FROM TOP OF EMPLACEMENT WALL.
5. LENGTH OF 157" IS FOR MAT WITH STANDARD EQUIPMENT SHOWN. INCREASE LENGTH TO 236" WHEN SECTIONALIZING ENCLOSURE IS REQUIRED IN DESIGN. COORDINATE WITH CIVIL DESIGN.
6. WHEN FIBER OPTIC CABLE IS NOT USED, 16"X12" TARGET DATA PANEL (TDP) CAN BE USED INSTEAD OF 24"X12" MASTER TARGET DATA PANEL (MTDP). FIBER PATCH PANEL IS NOT REQUIRED IN TDP.
7. THE ENDS OF THE CAT5E CABLES SHALL BE TERMINATED WITH A DATA SURGE PROTECTOR.
8. WIRE THE DPR AHEAD OF THE GFCI MAINTENANCE RECEPTACLE TO AVOID NUISANCE TRIPPING.
9. PERMANENTLY LABEL THE EMPLACEMENT ACCORDING TO THE CIVIL AND ELECTRICAL DESIGNATIONS.
10. PROVIDE SEAL FITTINGS AS SHOWN IN DETAIL ON SHEET ED-01 FOR ALL CABLE PENETRATIONS TO NEMA 4, 4X, OR 6P RATED ENCLOSURES.
11. INSTALL MYERS TYPE HUBS ON ALL CONDUIT PENETRATIONS TO SIDE OF ENCLOSURE.
12. ALL DIMENSIONS SHOWN IN INCHES UNLESS OTHERWISE NOTED.
13. IF TARGET IS BATTERY OPERATED WITH NO AC POWER PROVIDED, THE TARGET GROUND ROD SHALL BE INSTALLED WITH A 15' COILED #1/0 AWG BARE COPPER GROUND CABLE FOR FUTURE BONDING TO THE TARGET MECHANISM.
14. PROVIDE TARGET AND AUXILIARY OUTLETS WITH NEMA 3R WET LOCATION COVERS MAKING OUTLETS SUITABLE FOR USE IN WET LOCATIONS. SEE DETAIL SHEET (ED-01) FOR WET LOCATION COVER. IN USE COVERS SUCH AS LEVITON M59X TYPE OUTLET COVER WILL NOT CLOSE OVER TARGET PLUG AND CORD AND ARE NOT ACCEPTABLE FOR TARGET POWER AND AUXILIARY RECEPTACLES.
15. DEVIATIONS TO THE EQUIPMENT SIZES, EQUIPMENT NUMBERS, RECEPTACLE COVERS, OR CABLE ENTRY METHODS INTO ENCLOSURES WILL REQUIRE RANGE TRAINING AND LAND PROGRAM HUNTSVILLE CENTER MANDATORY CENTER OF EXPERTISE CONTACT.
16. CONDUIT STUBBED UP AS CLOSE TO CABLE SEAL FITTING AS POSSIBLE.
17. PREFERRED MOUNTING HEIGHT IS AT THE MINIMUM MOUNTING HEIGHT SHOWN FOR EQUIPMENT INSTALLED ABOVE FINISHED GRADE IN THE TARGET ELEVATION.
18. SEE SHEET ED-06 FOR ADDITIONAL INFORMATION ON TARGET DATA PANELS. SEE SHEET ED-07 FOR ADDITIONAL INFORMATION ON MASTER TARGET DATA PANELS.




## MAT TARGET ELEVATION

SCALE: NOT TO SCALE

US Army Corps of Engineers

| Rev. # | Description | Date | Approved |
|---|---|---|---|

Designed by: Date: Rev.
Dwn by: Ckd by: Design file no.
Reviewed by: Drawing code:
Submitted by: File name: Plot scale: Plot date:

U. S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

JUNE 2015

RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL

MOVING ARMOR TARGET
ELECTRICAL DETAILS

Sheet reference number:
ED-04

Sheet ___ of ___